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ABSTRACT

This qualitative study explored the perceptions of dental students, faculty, and graduate students on the development of a sense of touch in dental practice. Eight focus groups were held: four were comprised of third-year dental students (n=22), two of advanced, general dentistry postgraduate students (n=11), and two of dental faculty (n=8). Each group discussed the same six questions concerning the use of touch with patients. Dental students, graduate students, and faculty all described two basic forms of touch reassuring and procedural. Some students said they avoided touching patients as much as possible, and both students and faculty noted that during the clinical portion of the curriculum, there is no "formal" instruction or emphasis on learning how to touch patients in the dental setting. The findings suggest two possible reasons why students struggle to learn how to touch patients while in school: (1) the culture of the dental school, and (2) the "fine line" that appears to prevent students from asking for guidance or faculty from offering guidance to students. A commonly expressed recommendation was that students should have earlier clinical experience. (Contains 34 references.) (DB)

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Acquisition of a Touching Style in Dentistry: An exploratory study.

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Acquisition of a Touching Style in Dentistry:
An Exploratory Study

Abstract

Touch is essential to dentistry, but there is a little information published on how dental students develop a sense of touch, information possibly useful to dental faculty. This qualitative study explored the perceptions of dental students, faculty and graduate students on how they develop a sense of touch in dental practice. The findings suggest two possible reasons why students struggle to learn how to touch patients while in school: 1. the culture of dental school and 2. the 'fine line' that appears to prevent students from asking for guidance or faculty from offering guidance to students.

Acquisition of a Touching Style in Dentistry:

An Exploratory Study

Introduction

Touch, in various ways, plays an extremely important role in the practice of dentistry. It is virtually impossible for a dental practitioner to accomplish any task, short of reading radiographs, without being in physical contact (touch) with the patient. For example, touch is used in seating the patient, performing extra- and intra-oral exams, taking radiographs, using instruments and handpieces, and taking impressions.

Given the importance of touch in dental practice, there is a surprising dearth of information in the dental literature addressing the means by which dental students and dentists develop their sense of touch. Information about how dental students and dentists develop the use of touch, as well as how touch is perceived to be used by dental students and dentists, could be useful to dental faculty in teaching the requisite skills for dental practice for several reasons: Abrupt transitions must be made between pre-clinical motor skills development and clinical applications. Some students have initial difficulties moving into the clinic, not due to psychomotor skills, but due to insecurities dealing with patients. (Blanchard, Turner, Eschette & Coury, 1977) Because of the large amount of information and a variety of skills that need to be mastered by the students in the course of their dental education, time must be used wisely. It is worthwhile to look at issues that are not technique- and competency related which affect student transition into clinical settings. One of these is touch.

Review of the literature

It is important to define touch, as it relates to this study, by identifying what form of touch this study does not address. Specifically, this study does not address 'laying on of hands' in a healing fashion, which is intended to transmit energy such that the recipient will heal, nor does this study address inappropriate forms of touch. Touch, in this study, includes every other form of touch, from a pat on the shoulder or hand to adjusting a patient's head during an oral exam. These kinds of touch may be used in many ways, and will vary based on context.

A review of dental literature reveals little in the way of discussion or research about the use of touch in dental practice, or about how dental students learn to touch patients. Elfenbaum (1969) suggested that touch is one of the most important senses for a dentist; however, a delicate balance is required to accomplish the goals of treatment without forgetting that there is a patient attached to the tooth and surrounding soft tissues. (Smith, 1986) Touch coupled with a calm friendly voice has been shown to be useful with children, ages 3.5 to 10 years, in making dental visits easier for all concerned. (Greenbaum, Lumley, Turner & Melamed, 1993)

The nursing profession has studied the use of touch extensively as it applies to nursing practice. (Krieger, 1975; Pluckhan, 1978; Goodykoontz, 1979; & Weiss, 1979) Weiss (1979) presented a conceptual framework for the meaning of touch in nursing research and practice, which consisted of six 'qualitative symbols in a language of touch' (p.70): duration, location, action, intensity, frequency, and sensation. Estabrooks (1989) concluded that touching patterns are multifactorial and dynamic, changeable over time. Further work by Estabrooks and Morse (1992) suggested acquiring a touching style occurred in three stages: cultural background, nursing school, and work environment. Studies with

occupational therapy (Posthuma, 1985) and physiotherapy (Dockrell, 1988) students have agreed with Estabrooks that learning how to incorporate touch into practice is multidimensional, but suggest that learning these skills while in school will increase the likelihood of incorporating them into practice successfully later.

Dental educators have been concerned about the transition between the pre-clinical and clinical curricula; however, the emphasis has been on behavioral psychology and motor skill development. (Blanchard, et al, 1977) Touching style and acquisition thereof have not been addressed or studied within dentistry. Where it has been studied (nursing, occupational therapy, and physical therapy), there appears to be cultural, educational, and professional factors involved. A caring touching style is more likely to result when touch is learned during professional training. (Posthuma, 1985)

Methods

This qualitative case study investigated acquisition of touching style and use of touch in caring for patients from the perspective of dental students and dentists within the context of professional education. Case studies are required in studies where description of a phenomenon is needed to reveal and adequately develop a hypothesis or theory. (Atchison, 1996; Gift, 1996; & Yin, 1994) Focus group methodology was used to allow participants to fully discuss each question from their own unique viewpoints and to elaborate on responses. (Morgan, 1998 & 1994; Krueger, 1988 & 1994; & Morgan, 1992) All participants were volunteers.

This study was conducted in a large urban dental school in the Northeastern United States with approximately 110 students per class. It has a competency- and requirements-driven curriculum in which comprehensive care is provided in discipline-based clinics.

Eight focus groups were held: four were third year dental students, two were advanced general dentistry postgraduate students and two were dental faculty. (See Table 1 for demographic information about participants.) Only the primary investigator acted as moderator of the focus groups. Specific questions were asked of each focus group; however, because of the dynamic nature of focus groups, discussion of responses was explored when possible. The questions asked were:

1. How do you use touch in your contact with patients?
2. How did you learn to use touch with patients, and who was most significant in your learning to use touch?
3. How do you perceive your use of touch? (Too strong, too gentle?)
4. How do you think your patients perceive your touch?
5. Have you had an instance when your touch triggered a negative response? Describe the instance and how you dealt with the negative response.
6. What suggestions would you give back to the school regarding learning how to use touch as a dental student?

Each focus group was audio taped for accuracy, and someone not affiliated with the school or study transcribed the tapes. Only the primary investigator and the transcriber listened to the tapes to assure anonymity for the participants in the dental school. The transcripts were coded to protect the identities of the participants, and analyzed textually for common and consistent themes as stated by students and faculty. Each cohort was analyzed separately first, then compared across cohorts.

Findings

Dental students, graduate students and faculty described two basic forms of touch – reassuring and procedural, similar to results reported by McCann and McKenna (1993) with

nursing students. Reassuring touch could be for either the patient or the student. The following are examples of how reassuring touch was described.

> "I know that when I feel like my patient is getting a little antsy, I'll touch them on the shoulder just to make sure that they know that I'm there and that they shouldn't get nervous, especially when an instructor or two comes over to make sure that everything is okay." [female student, 1:4]
>
> "To me, it's more of a control issue. I want them to know that I am in control when their head's in the chair and they're not to move." [male student, 1:4]
>
> "More like the pedo patients…like especially when they first come in, they're pretty scared and nervous and I'll hold their hand and bring them back to the chair." [female student, 3:4]

Procedural touch was described by all participants, as in taking impressions; retracting cheeks, lips or the tongue; taking radiographs; taking impressions; doing a restoration preparation or any type of irreversible procedure; doing a prophylaxis; using the hand piece or hand instruments; and giving anesthesia. Faculty and students talked often about being requirement-focused, or 'task oriented,' which might interfere with efficient acquisition of a touching style. Examples of being 'task oriented' are the following:

> "I think that the students tend to be very focused on their requirements, as well they should be; however, sometimes it's at the expense of learning." [male faculty, 3:2]
>
> "You're not just working on, like in pre-clinic, on a mannequin. Sometimes I'll notice, like this morning I was doing perio and I was working on this patient, and for a good 15 minutes I was concentrating on what I was doing. He was quiet. He was for the most part like dozing off. And I forgot that he

was there. And so, if I'm always like readjusting or moving his head or whatever, it will remind me he's there and I'll tell him what I'm doing if you have any questions, or whatever." [male student, 1:2]

"You're not treating a dummy head anymore. You're treating a human being. We're given a task. We're not – we're never given a task to comfort the patient. We're given a task to go do a filling. There's a difference there." [male student, 1:1]

"We do everything, but they're classified as my denture patient. They're not classified as Mrs. Jones. This is my 3-unit bridge patient. And they introduce them to their friends." [male student, 1:1]

"We're supposed to be running our own mini-practice. We're supposed to have these patients and we're supposed to schedule them and have them - the problem is that you're thrust into this thing and you've got all these patients to deal with and you've got all the different problems and you've got all these different floors." [male student, 4:2]

Being task oriented is not a new concept in dental education, but was described by Schifter (1986) and others. (Fredericks & Mundy, 1968; Helfrich & Quarantelli, 1974: & Sherlock & Morris, 1972) Given the need to accomplish all that is required to graduate from dental school, one could argue that students must be task oriented in order to graduate on time. But, does being task oriented get in the way of learning how to touch patients? One faculty member made this observation, which indicates that perhaps being task-oriented does get in the way of learning how to touch patients.

"And oftentimes in the clinic I see how students are using touch on their patients, and it's as if they're working on mannequins. .. (A student) was

> unaware that this was a human being, you know, the patient, who had sensations in these other parts of her body. I remember a few years after I graduated from dental school, I was helping a friend of mine find a patient for the boards. I found the patient and invited my friend to the office to meet this patient, and to also perform an examination. And my friend proceeded to examine this patient of mine, and with his mirror he knocked around the teeth a bit and I realized that he hadn't learned how to [treat a person rather than a set of teeth]." [male faculty, 3:2]

Some students said they avoid touching patients as much as possible for many reasons, including to avoid litigation.

> "I use verbal commands more than anything; because at the beginning, I found out that if I start to turn someone's head, then they go [demonstration of head moving] ...I'll just say, 'I need you to turn your head to the right slightly,' or 'turn your head way, way to the right'." [female student, 1:1]
>
> "I'd be afraid to touch my adult patients. Era of litigation. You just have to be careful with everything. The truth is … I'll hold their head when I'm working sometimes, positioning it back and forth." [male student, 2:4]

Avoiding touching patients was an intriguing concept, and may be related to being 'task oriented', or to not perceiving the patient as a real person, but someone/thing on whom/which to practice being a dentist. Both of these concepts need further investigation and clarification, which was beyond the scope of this study.

Both students and faculty stated that, once students arrive in clinic after two years of pre-clinic, there was no 'formal' curriculum or set of activities or emphasis from faculty on

learning how to come into contact with or touch patients in this setting. For most students, this process was described as trial and error.

> "Offhand, I'd say it's kind of like trial by fire. …And usually when you work with a classmate, they have a little more trust in the person they pick to work with." [male student, 1:3]
>
> "You go to take a bur to a tooth, to enamel and dentin, and it's totally different [from ivorene], the way the handpiece feels, the amount of pressure, the tactile sense with the hand piece. So I guess, what I'm driving at is, in terms of preparation, is that what we're talking about as far as touch? There wasn't any. …But you learn just the same. You learn because you have to." [male student, 5:3]
>
> "I'd say that 85-percent of our learning is all self-taught." [male student, 3:3]
>
> "Yeah, I think it's a lot better now. I mean, we just - like I said, it's trial and error, just doing it on the patients and hopefully not having to re-shoot too many [x-rays]." [female student, 1:2]

This trial and error process often also depended upon who the instructor and fellow students were in the clinic during any one session. Students did indicate learning from observing others.

> "I just happened to be in [recall] clinic with one of my very first patients. …and Dr. S. happened to be there that day. …I kept moving and moving her and moving me and moving my hands and he said, 'Maybe I can help you with that.' So he sat down and showed me everything." [female student, 1:4]

"Or even from each other. There are a lot of times that someone has done a procedure or something that they'll give a hint and don't do this, and don't do that…" [female student, 2:1]

"I think just about everything you learn here - not everything, but there's a lot of stuff that's just luck of the draw, and hopefully you just keep drawing enough that you learn everything by the time you leave." [male student. 4"2]

Students and faculty alluded to the 'fine line' they walk in either asking for or offering help regarding issues of touch. For students, asking for help could be considered as lack of knowledge or incompetence.

"You kind of have to word it so that you want them. You ask them to come over and elaborate on what it is that you're doing. Cause if you just say, 'I just can't do this.' Or … sometimes they'll just pick up the high speed and they'll just finish what it is that you're doing." [female student, 3:4]

"…we all walk a very thin line. You don't want to ask too many questions, and you don't want to seem that you know too much, and you don't want too much help, and you've got to be very careful … what you ask." [male student, 1:4]

"But the thing is, though, if you already know how to do things, you don't want somebody to come over and start explaining things to you when you already know, the different steps and what to put, because it's a waste of time for me 'cause I can get more done." [female student, 2:4]

"[Students would] certainly feel safer [asking a peer for advice] I should think, rather than asking a faculty member. Easier to go to a peer than to faculty." [female faculty, 1:2]

Both of these concepts, a) learning to touch patients by trial-and-error and b) the 'fine line' between students asking for help and faculty offering help, were intriguing. If students are afraid to ask for help because of concern for appearing incompetent to either the patient or instructor, by default they learn by trial-and-error. Similarly, if faculty are concerned about offering help where it is perhaps not needed, the students are again left to learning by trial-and-error. Perhaps this phenomenon is unique to dental education; however, students do need to learn these skills and faculty are there to facilitate the learning experience.

Discussion

The dental students, dental graduate students and dental faculty who participated in this study described the process of learning how to touch patients and developing a style of touching as informal (i.e., trial and error). They described using information gathered from observation of others (students or faculty) and from faculty who took an opportunity to teach specific skills. However, the operative word is "skills," not "touch."

While these findings are not earth shattering, they may provide insight into why some students have a difficult time entering the clinic, being in physical contact with patients, and being productive clinically. After two years spent learning information and motor skills and feeling somewhat confident, the first contact with patients brings the students to the reality of being a beginner once again. Patients know the students are just learning and can destroy a student's confidence with a simple question. Similarly, asking assistance from faculty can provide the same feelings of incompetence. Dental educators further complicate the situation by asking dental students to be responsible for every part of their "dental practice" - making appointments, doing most of the lab work, completing insurance forms (all of which is not

akin to dental practice today) - and then we somehow expect them to acquire an appropriate touching style.

Data from this study confirmed previous reports by Schifter (1986) and Fredericks and Mundy (1968) that dental students are highly motivated to be in the clinic because that's where they begin to feel like a "real dentist." Helfrich and Quarantelli (1974) pointed out in their four-year study of dental students that there is minimal difference between what a dental student does in clinic and what a dentist does in practice, as compared to other professional education, which has not changed in the ensuing twenty-five years. Schifter's (1986) one-year study of a first year dental class suggested that students become focused on specific projects in pre-clinical laboratories, and related this to the task-oriented culture that the students in her study developed over the course of the first year of dental school.

As pointed out by Tedesco (1986, p. 602), "...it is possible that the uniform environment envisioned by dental educators is not experienced uniformly by students." As an example, the courses that use role playing to teach skills in patient management, active listening, etc., important skills for a practitioner, are often not taken seriously by students who want to "do dentistry" or tasks. (Schifter, 1986) We would suggest further, as posited by Bosk (1979)regarding medical surgical residents, that each clinic has specific norms that students must master in order to satisfactorily meet requirements or tasks. Additionally, variations in the teaching and practice styles of clinical faculty exist. Or as Fox (1957) noted about medical students, the initial uncertainty gives way to 'certitude' as the students gain experience, which in dentistry might be a mediated experience involving the student-patient dyad and faculty. However, Posthuma (on occupational therapy students, 1985) and Dockrell (on physiotherapy students, 1988) have suggested that unless students learn how to touch patients/clients in non-procedural ways while in training for the profession, they are less

likely to incorporate such behaviors into their practice style later on. This may also be true for dental students. However, if students must focus their attention on requirements, on differences between clinics and faculty teaching styles, and if there is no formal curriculum effort to teach and/or reinforce appropriate forms of touch, the student may or may not develop a sense of touch beyond procedural, as noted by the faculty member in the example on pages 7 and 8.

Basically, dental students have to "practice" enough at being a dentist for faculty to certify them as being competent. The differences between the pre-clinic and clinic are not going to disappear. Perhaps a guided transition between the two environments would facilitate students' attention to the "touch" side of dentistry rather than just its technical aspects, but this assumes that the transition into the clinic is the mitigating factor for learning how to touch patients for reasons other than procedural. The theoretical models developed in nursing literature may or may not apply in dentistry, since nursing and dentistry are very different professions. What might be applicable are the three stages of acquiring a touching style as proposed by Estabrooks and Morse (1992), who studied practicing nurses: cultural background, school and work environments. This study did not control for cultural background and these students were not yet ready to enter the work environment. Only the aspects of the dental school clinical experience was explored in this study.

One very basic aspect of dental education is that, when the students start in the clinic, the focus is on safety and procedures. The dental students in this study were all finishing their third year of dental school, the first year of clinical experience. Focusing on getting the procedures done safely, without thinking about how their touch was perceived by either patients or themselves, was not surprising. As noted earlier, students and faculty discussed procedures because of the implicit need to "get the job (i.e., graduation requirements) done;"

and while some faculty did stress the importance of patient comfort management, getting the job done often took priority.

When asked about suggestions the focus group participants might make to the school about how to help students learn how to physically come into contact with patients, the most consistent response was for the students to be in clinic sooner. Each group of participants agreed that students should get into the clinic as early as possible to observe, to assist, and to be a clinician.

> "I would say as a pre-clinical student to spend more time in the clinical setting, like even if it's just sitting there assisting, suctioning. I know you can't … really learn by watching somebody, but you just get comfortable with the chair, the hand piece, the noise, where everything is, the paper work and it makes you … a little bit more comfortable." [female student, 2:1]
>
> "Meaning you should have been in the clinic from day one or even having a requirement of assists or something like that. You're there with a senior student as a freshman. You are assisting and you are getting some very basic hands on stuff." [male student, 5:3]
>
> "Being an assistant would help you to learn actually to take care of patients, how to be more concerned and be a kinder dentist in the future. If they started freshman year, get us all to think about it and get some idea and start clinical experience in sophomore year which is very necessary." [female graduate student, 2:1]

It would be very easy to posit that getting students into the clinic earlier would facilitate learning how to touch patients, or that observing upper-class students treating patients would create modeling of treatment behaviors. Getting into the

clinic earlier might give the student a feeling of 'being a dentist' (which is clearly their goal); but it might not actually accelerate the acquisition of a touching style. One way to approach this might be using professional patients or mock clinics, which have been successful in medical (Fang, Hillard, Lindsay, & Underwood, 1984), nursing (Hanna, 1991) and physical therapy (Kelly, Brown, Perrin & Gardner, 1998) education, all of which are intensive hands-on health professions requiring students to acquire an appropriate touching style. While there are positive and negative sides to professional patients or mock clinics, applications to dental education could be explored as they relate to helping dental students in acquiring an appropriate touching style. Feedback from professional patients, with faculty facilitation, might provide students with learning experiences in this area.

Each dental school has its own learning environment, influenced by its faculty, its students and its patient population. This study was intended as a non-judgmental exploration of how dental students in one learning environment learn to touch patients. The students and faculty who participated in this study expressed a number of concerns and concepts that have not been addressed in the dental education literature to date. Perhaps one outcome of this study could be an honest dialogue among dental educators on this and related topics, similar to the conference on how dentistry applied behavioral sciences to teaching and the curriculum. (Special Issue, Journal of Dental Education, 1983)

Further research in how dental students learn to contact patients physically, including replication of this case study and further phenomenological research in the clinic environment itself, is needed. Student discomfort with entering the clinic and with physical contact with patients are not new concepts, but have been addressed predominantly from a

psychosocial perspective, (Special Issue, Journal of Dental Education, 1983) rather than actually gleaning information directly from the students.

From the results of this preliminary case study, we hypothesize that the difficulty many dental students seem to have in learning to 'touch' patients is in the transition from the pre-clinic (controlled environment, task-oriented, touching and manipulating things) to the clinic (more complex, unpredictable environment, a milieu in which psychosocial skills are needed in addition to "good hands"). Traditional dental education has emphasized acquisition of motor skills, which may have resulted in the minimization of the acquisition of social skills. (Tedesco, 1986) In reality, dental education needs to provide both sets of skills in order to prepare the student to treat both the dental/oral "problem" and the person to whom the problem belongs.

Several points regarding the study need to be made: first, in accordance with the research protocol, all the participants were volunteers. In any qualitative study, participants have their own motives for participating, (Atchison, 1996), which may raise concerns as to the validity of the data gathered and to the representation of the larger population from which the sample was taken. In this study, all eight of the focus groups noted the same issues, seeming to represent experiences common to the larger group represented. Secondly, the sample (n=41) was small, but the data gathering was meant to saturate concepts rather than to be exhaustive. With each group giving a similar description of the issues under study, there was no need to gather further data from this site. Since this study was conducted at only one dental school, the study needs to be replicated to verify these findings as generalizable to the dental educational process.

Application of This Study to Other Professions

Most health professions have a strong hands-on aspect to them. Professions such as medicine, nursing, physical therapy, occupational therapy, and podiatry are only a few to mention. Physical therapy and occupational therapy are two professions where the faculty who provide the clinical instruction and supervision of the students are not the faculty who teach in the pre-clinical courses. Both of these professions have identified this potential problem and clinical faculty are given opportunities to become more closely affiliated with the various programs from which they take clinical students. Consistency between the didactic curriculum taught by full time faculty and the clinical curriculum taught by clinicians is more likely to occur with such communication. Even in these programs there is the possibility that the students, like the dental students in this study, don't want to look foolish in front of patients/clients or don't want to have the clinician think they don't know what they are doing, thereby not asking for instruction when needed. The clinicians similarly might not offer assistance because the student just might know what he/she is doing. A multiple comparison study would be insightful.

An important parallel is the comparison between the health professional preparing for the clinical experiences and the pre-service teacher preparing for student teaching. Experience is considered to an excellent teacher, giving the novice opportunity to hone skills and understanding of their field. (McDermott, Gormley, Rothenberg & Hammer, 1995) The soon-to-be student teacher has the same potential problem as the health profession student in that student teaching, like the student dental practice, "is the bridge between preparing for teaching and the beginning of a teaching career; (Weaver & Stanulis, 1996, p.27) and the practicum teacher is not the one who taught basic skills. As Weaver and Stanulis noted, "The fit between preparation and actual teaching is never perfect; the most conscientiously

prepared student teacher will find that a portion of the work of student teaching involves an ongoing accommodation of differences between the preparation for teaching and life in the classroom."(p.27) This statement can be directly applied to dental education. For both the student teacher and student dentist (or any other health profession student), there is an assumption that a clinical "practitioner"/mentor/teacher provides the student with the same theoretical and practical frameworks taught in the didactic portion of the curriculum. Is there a "fine line" between students asking for and "clinical" faculty offering assistance in other health professions and even student teacher education? Interestingly, Johnston (1994) reported, in her study of the role of experience in learning to teach, the theme of "trial and error" as how participants described learning how to teach during student teaching. In this study, the reason for "trial and error" was that every move was being evaluated thereby obviating the opportunity to explore methods and/or ask for assistance. This is interestingly similar to what the dental students in this study presented. Perhaps it is the pressure of being constantly evaluated (student teachers or student dentists alike) that promotes the "trial and error" atmosphere, or perhaps this is one of many confounding pressures.

Overall, communication and the perception of or belief in collaboration between the student (teacher, dentist, etc.) and the practitioner/mentor/teacher may be the key. Hoover, O'Shea and Carroll (1988) identified limited interactions due to time constraints (e.g., teaching or research responsibilities) as a contributing factor in ineffective communication between the university supervisor, cooperating teacher and student teacher. While the cooperating teacher may supervise only one student teacher, interactions may be compromised due to time constraints of classroom teaching responsibilities with 20-30 students. Similarly, one possible contributing factor to limited communication between dental students and clinician educators (thus creating the "fine line" described in this study)

may be the time constraint imposed by the nature of dental clinical education with one clinician educator to five or six dental student clinicians, complicated by student clinicians having specific requirements to complete.

This study was exploratory in nature, meaning there is great need to continue to examine the concepts uncovered. A cross-disciplinary extension would provide educators with greater understanding of all the factors that create the clinical education environment, no matter where that might be. Understanding and examining multiple facets of the dynamic and complicated world of clinical education will provide guidance to supporting the students and faculty.

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Table 1. Demographics for the DMD Focus Group Study, 1997

Dental Students:	
22 total	Age range: 24-40 (1 missing data), average: 27.86 years
12 Male	Age range: 24-40 (1 missing data), average: 28.36 years
10 Female	Age range: 24-36, average: 27.3 years
AEGD Students:	
11 total	Age range: 25-37, average: 26
6 Male	Age range: 25-37, average: 28.3
5 Female	Age range: 26-37, average: 31.2
Faculty:	
8 total	Age range: 33-62, average: 46
6 Male	Age range: 33-62, average: 45.3
2 Female	Age range: 46-50, average: 48
4 Full time	Years of teaching: 13 to 24, average: 19 years
4 Part time	Years of teaching: 2 to 19, average: 7.25 years*

(*Part time faculty practice in general practice, adult dentistry and pediatrics.)